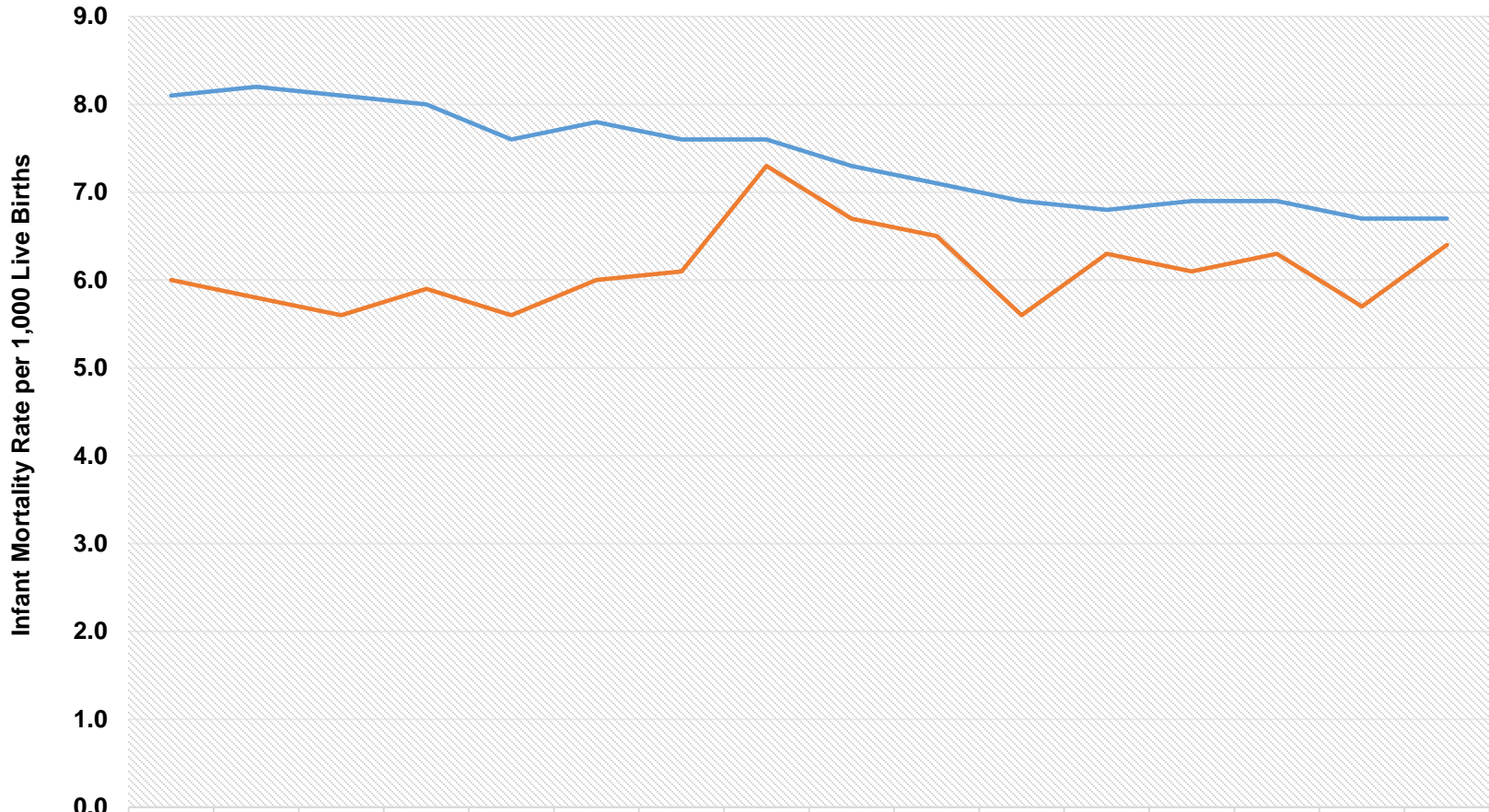


Infant Mortality Rates in Macomb County and Michigan by Three-Year Moving Averages (2000 - 2017)



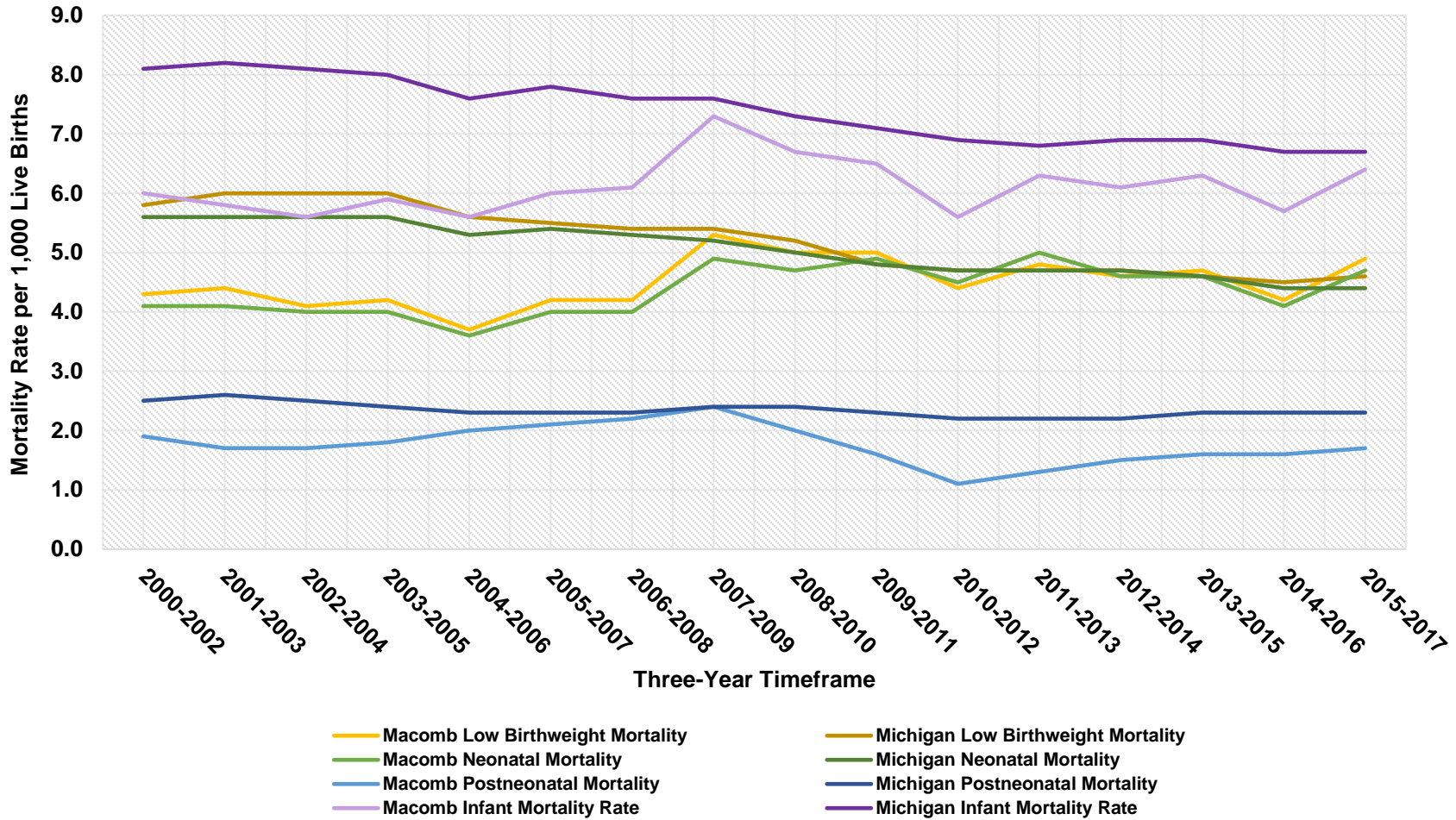
	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
Macomb	6.0	5.8	5.6	5.9	5.6	6.0	6.1	7.3	6.7	6.5	5.6	6.3	6.1	6.3	5.7	6.4
Michigan	8.1	8.2	8.1	8.0	7.6	7.8	7.6	7.6	7.3	7.1	6.9	6.8	6.9	6.9	6.7	6.7

Note: Infant deaths are defined as deaths occurring to individuals less than 1 year of age. The infant mortality rate is the number of resident infant deaths divided by total resident live births multiplied by 1,000.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Low Birthweight, Neonatal, Postneonatal, and Infant Mortality Rates in Macomb County and Michigan by Three-Year Moving Averages (2000 - 2017)

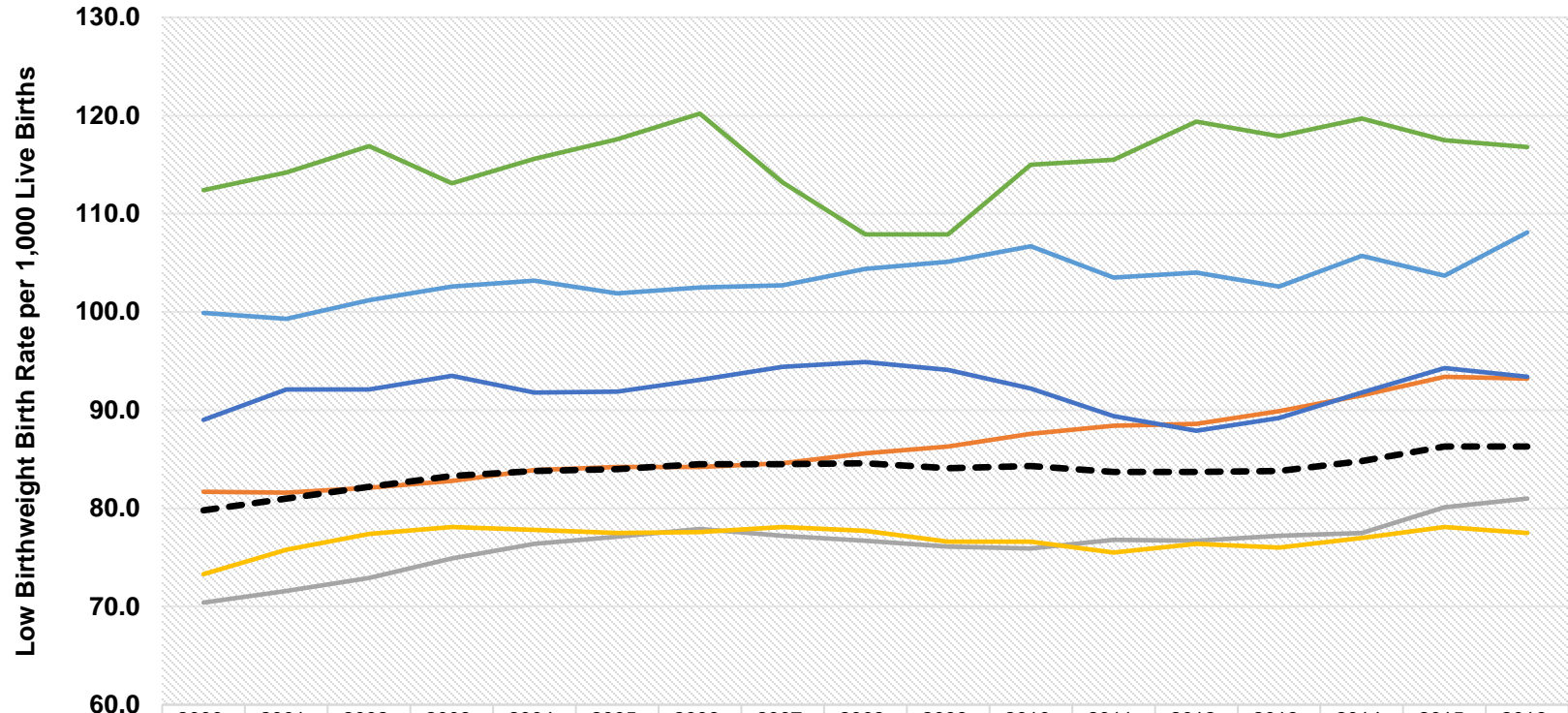


Note: Infant deaths are defined as deaths occurring to individuals less than 1 year of age. The infant mortality rate is the number of resident infant deaths divided by total resident live births multiplied by 1,000. Neonatal mortality rate is the number of infant deaths that occurred within the first 27 days of life per 1,000 live births. Postneonatal mortality rate is the number of resident deaths occurring to individuals at 28-364 days of age divided by total resident live births multiplied by 1,000. Low Birthweight mortality rate is the number of infant deaths with birthweight less than 2,500 grams divided by total resident live births multiplied by 1,000.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Low Birthweight Birth Rate in Macomb County, MI by Mother's Age and Three-Year Moving Averages (2000 - 2018)



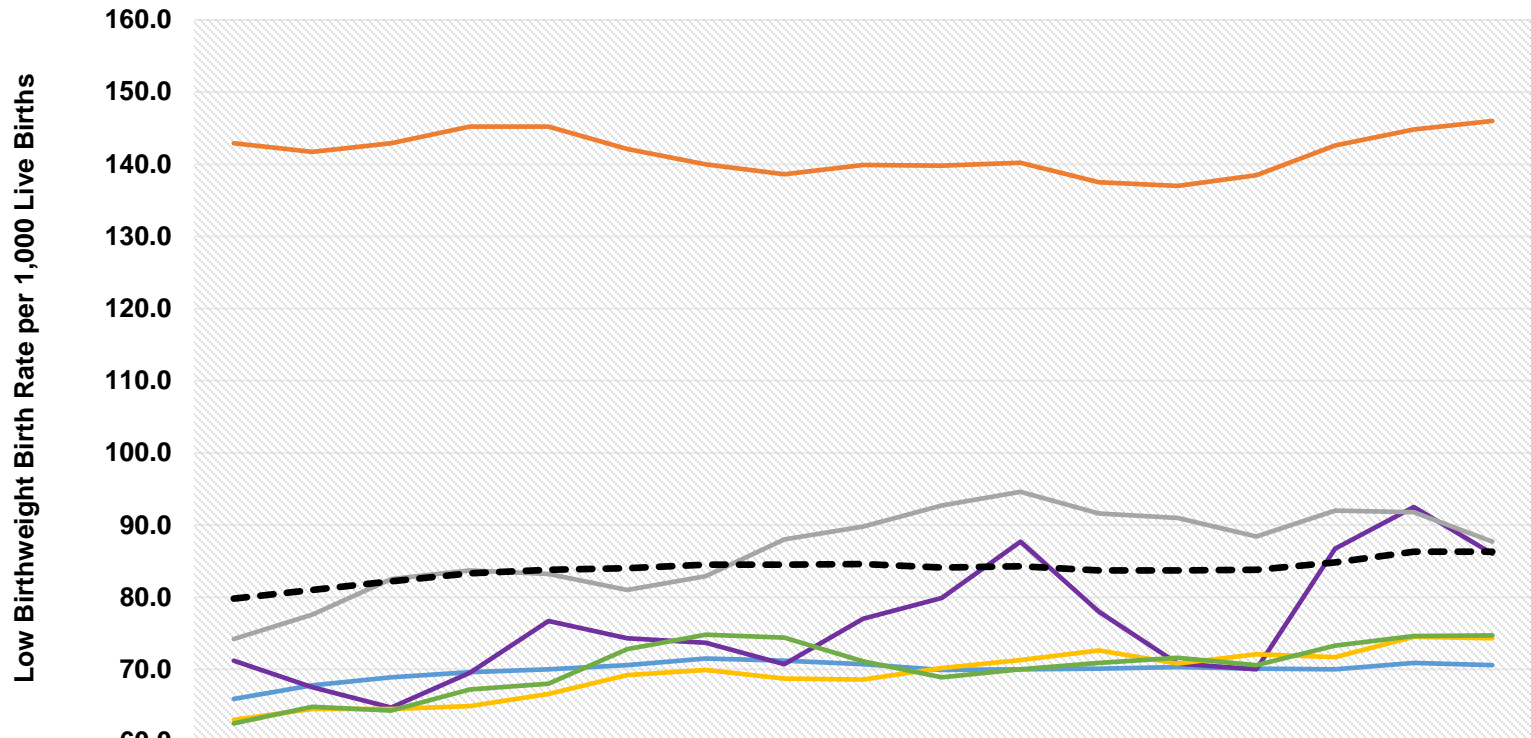
	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
— Ages 15-19	99.9	99.3	101.2	102.6	103.2	101.9	102.5	102.7	104.4	105.1	106.7	103.5	104.0	102.6	105.7	103.7	108.1
— Ages 20-24	81.7	81.6	82.1	82.8	83.9	84.2	84.2	84.6	85.6	86.3	87.6	88.4	88.6	89.9	91.5	93.4	93.2
— Ages 25-29	70.4	71.6	72.9	74.9	76.4	77.1	77.9	77.2	76.7	76.1	75.9	76.8	76.7	77.2	77.5	80.1	81.0
— Ages 30-34	73.3	75.8	77.4	78.1	77.8	77.5	77.6	78.1	77.7	76.6	76.6	75.5	76.4	76.0	77.0	78.1	77.5
— Ages 35-39	89.0	92.1	92.1	93.5	91.8	91.9	93.1	94.4	94.9	94.1	92.2	89.4	87.9	89.2	91.8	94.3	93.4
— Ages 40+	112.4	114.2	116.9	113.1	115.6	117.6	120.2	113.2	107.9	107.9	115.0	115.5	119.4	117.9	119.7	117.5	116.8
- - - All Ages	79.8	81.0	82.2	83.3	83.8	84.0	84.5	84.5	84.6	84.1	84.3	83.7	83.7	83.8	84.8	86.3	86.3

Note: Low Birthweight births are live births weighing less than 2,500 grams. Rates are per 1,000 live births.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Low Birthweight Birth Rate in Macomb County, MI by Mother's Race & Ethnicity and Three-Year Moving Averages (2000 - 2018)



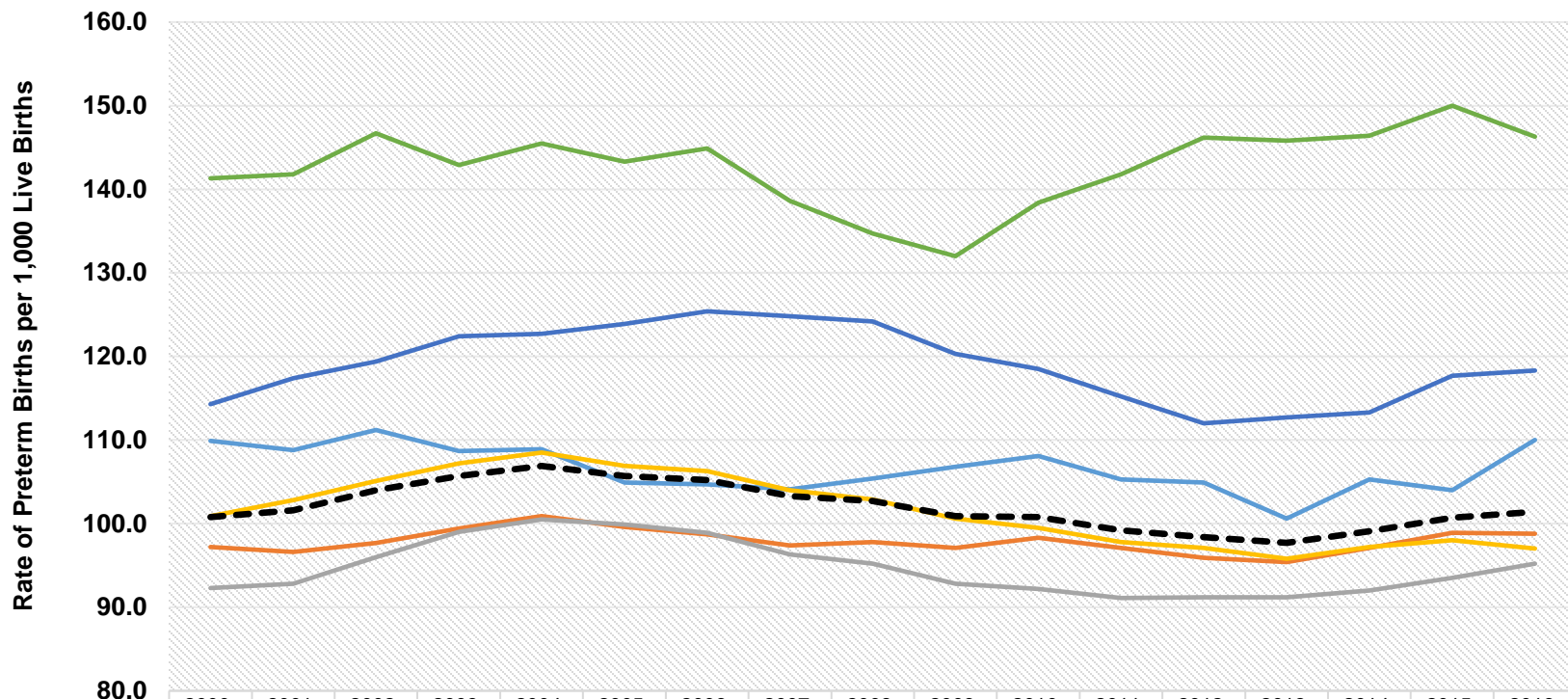
	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
White	65.9	67.8	68.9	69.6	70.0	70.6	71.5	71.2	70.7	69.9	70.0	70.1	70.3	70.1	70.0	70.9	70.6
Black	142.9	141.7	142.9	145.2	145.2	142.1	140.0	138.6	139.9	139.8	140.2	137.5	137.0	138.5	142.6	144.8	146.0
American Indian	71.2	67.5	64.7	69.5	76.7	74.3	73.7	70.7	77.0	79.9	87.7	78.0	70.8	70.0	86.7	92.5	86.0
Asian & Pacific Islander	74.2	77.6	82.5	83.7	83.2	81.0	82.9	88.0	89.8	92.7	94.6	91.6	91.0	88.4	92.0	91.8	87.7
Hispanic Ethnicity	63.0	64.5	64.5	64.9	66.6	69.2	69.9	68.7	68.6	70.2	71.3	72.6	70.8	72.1	71.7	74.5	74.3
Arab Ethnicity	62.5	64.8	64.3	67.2	68.0	72.8	74.8	74.4	71.1	68.9	70.0	70.9	71.6	70.6	73.3	74.6	74.7
All Races & Ethnicities	79.8	81.0	82.2	83.3	83.8	84.0	84.5	84.5	84.6	84.1	84.3	83.7	83.7	83.8	84.8	86.3	86.3

Note: Low Birthweight births are live births weighing less than 2,500 grams. Rates are per 1,000 live births.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Preterm Birth Rate in Macomb County, MI by Mother's Age and Three-Year Moving Averages (2000 - 2018)



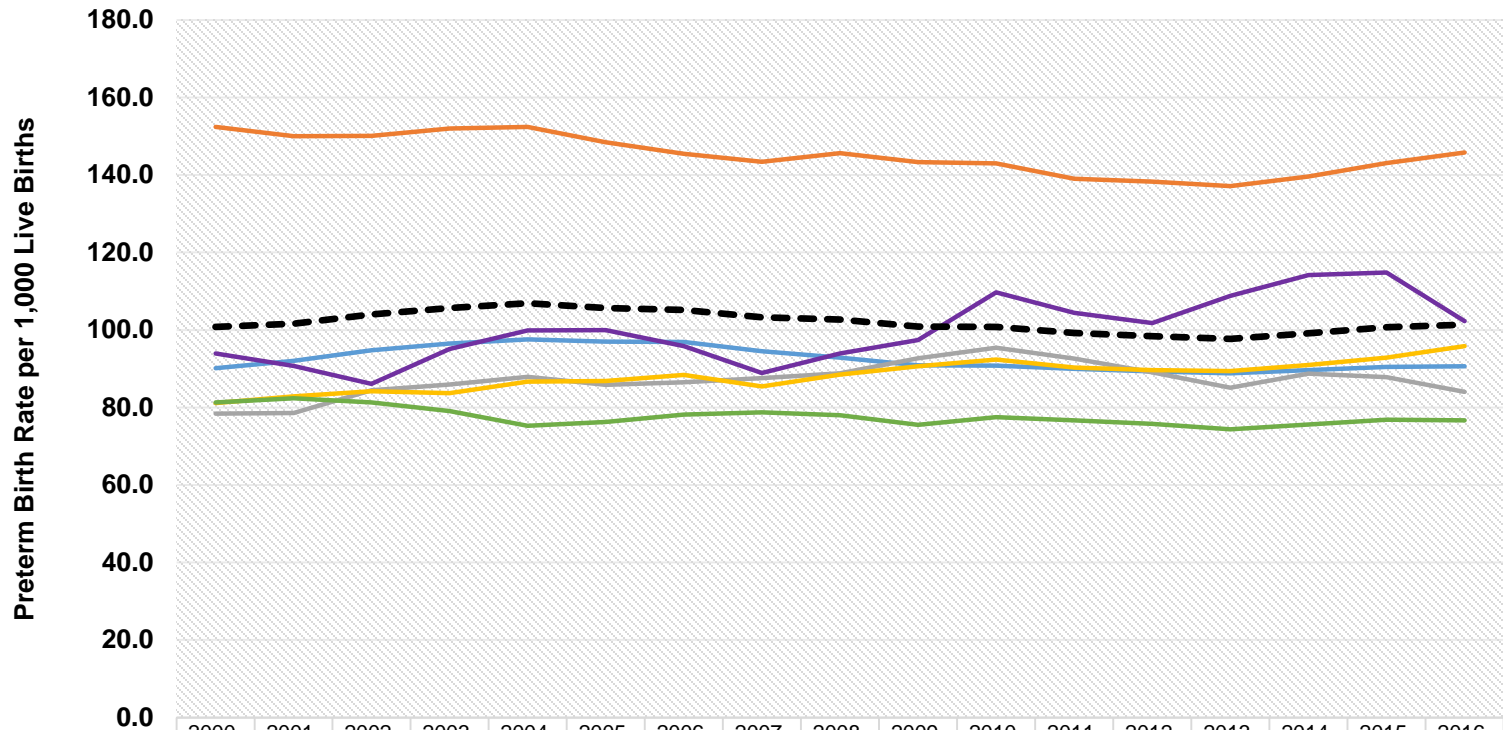
	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
— Ages 15-19	109.9	108.8	111.2	108.7	108.9	104.9	104.7	104.1	105.4	106.8	108.1	105.3	104.9	100.6	105.3	104.0	110.0
— Ages 20-24	97.2	96.6	97.7	99.4	100.9	99.6	98.7	97.4	97.8	97.1	98.3	97.1	95.9	95.4	97.1	98.9	98.8
— Ages 25-29	92.3	92.8	96.0	99.0	100.5	99.9	98.9	96.3	95.2	92.8	92.2	91.1	91.2	91.2	92.0	93.5	95.2
— Ages 30-34	100.9	102.8	105.1	107.2	108.5	106.9	106.3	104.0	102.9	100.6	99.5	97.8	97.1	95.8	97.2	98.0	97.0
— Ages 35-39	114.3	117.4	119.4	122.4	122.7	123.9	125.4	124.8	124.2	120.3	118.5	115.2	112.0	112.7	113.3	117.7	118.3
— Ages 40+	141.3	141.8	146.7	142.9	145.5	143.3	144.9	138.6	134.7	132.0	138.4	141.8	146.2	145.8	146.4	150.0	146.3
- - - All Ages	100.8	101.6	104.0	105.7	106.9	105.7	105.2	103.3	102.7	100.9	100.8	99.2	98.4	97.7	99.1	100.7	101.4

Note: Preterm births are defined as infants born prior to 37 completed weeks of gestation. Gestational age is based on the obstetric estimated per the American College of Obstetricians and Gynecologist's recommendation. Rates are per 1,000 live births.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Preterm Birth Rate in Macomb County, MI by Mother's Race & Ethnicity and Three-Year Moving Averages (2000 - 2018)



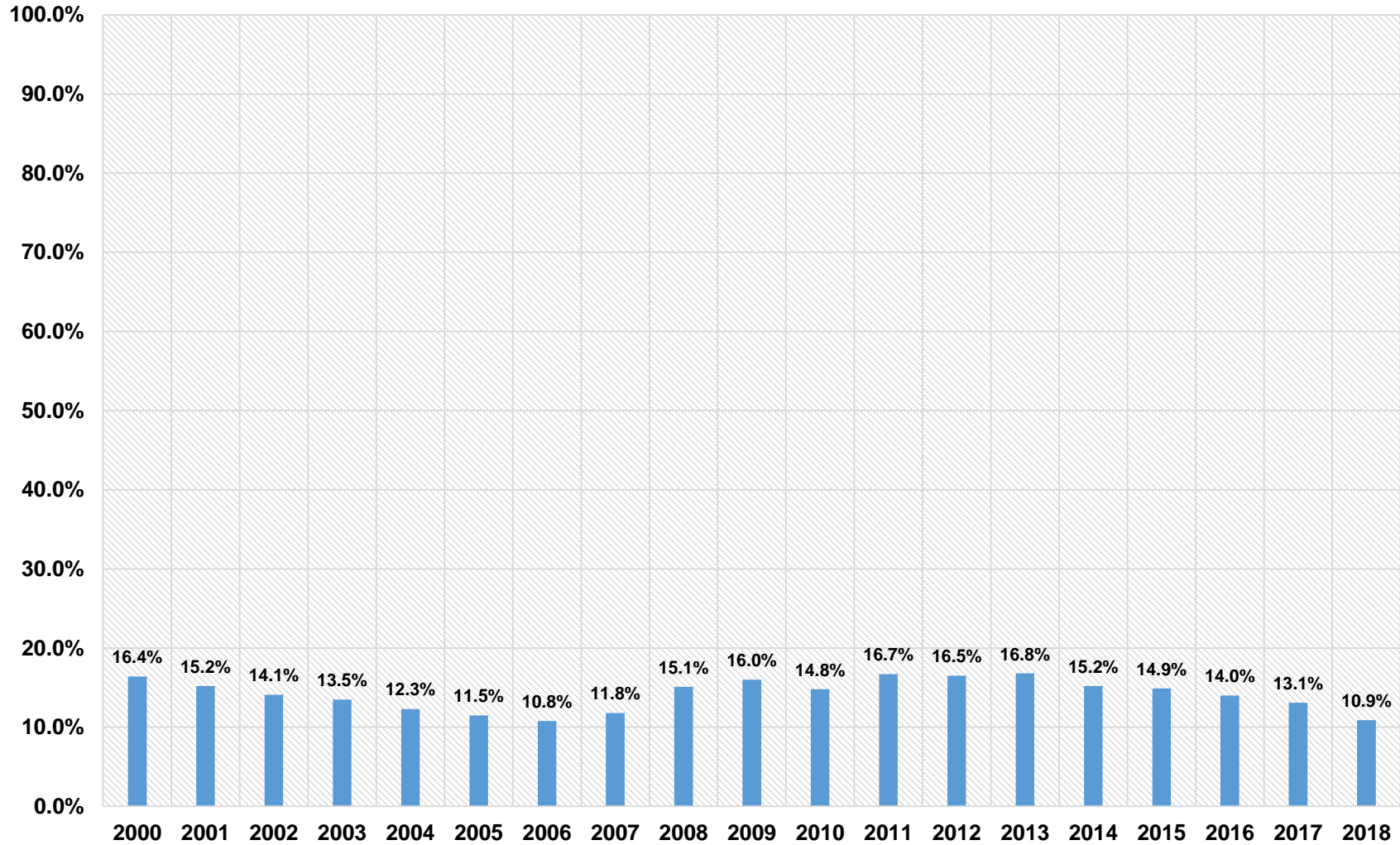
	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
White	90.1	92.0	94.8	96.5	97.6	97.0	96.9	94.5	92.9	90.9	90.8	90.0	89.3	88.8	89.6	90.5	90.6
Black	152.4	150.0	150.1	152.0	152.4	148.4	145.5	143.4	145.6	143.3	143.0	139.0	138.3	137.1	139.6	143.1	145.8
American Indian	93.9	90.7	86.1	95.1	99.9	100.0	95.8	88.9	93.9	97.4	109.7	104.4	101.8	108.8	114.2	114.8	102.3
Asian & Pacific Islander	78.4	78.6	84.4	85.9	87.9	85.8	86.5	87.6	88.8	92.7	95.4	92.6	89.1	85.1	88.7	87.8	84.0
Hispanic	81.1	82.9	84.2	83.7	86.7	86.8	88.4	85.4	88.5	90.6	92.4	90.3	89.6	89.4	91.0	92.9	95.8
Arab	81.3	82.4	81.3	79.1	75.3	76.3	78.2	78.7	78.0	75.5	77.5	76.7	75.8	74.4	75.6	76.8	76.7
All Races	100.8	101.6	104.0	105.7	106.9	105.7	105.2	103.3	102.7	100.9	100.8	99.2	98.4	97.7	99.1	100.7	101.4

Note: Preterm births are defined as infants born prior to 37 completed weeks of gestation. Gestational age is based on the obstetric estimated per the American College of Obstetricians and Gynecologist's recommendation. Rates are per 1,000 live births.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Percent of Live Births with Maternal Tobacco Use in Macomb County, MI by Year (2000 - 2018)

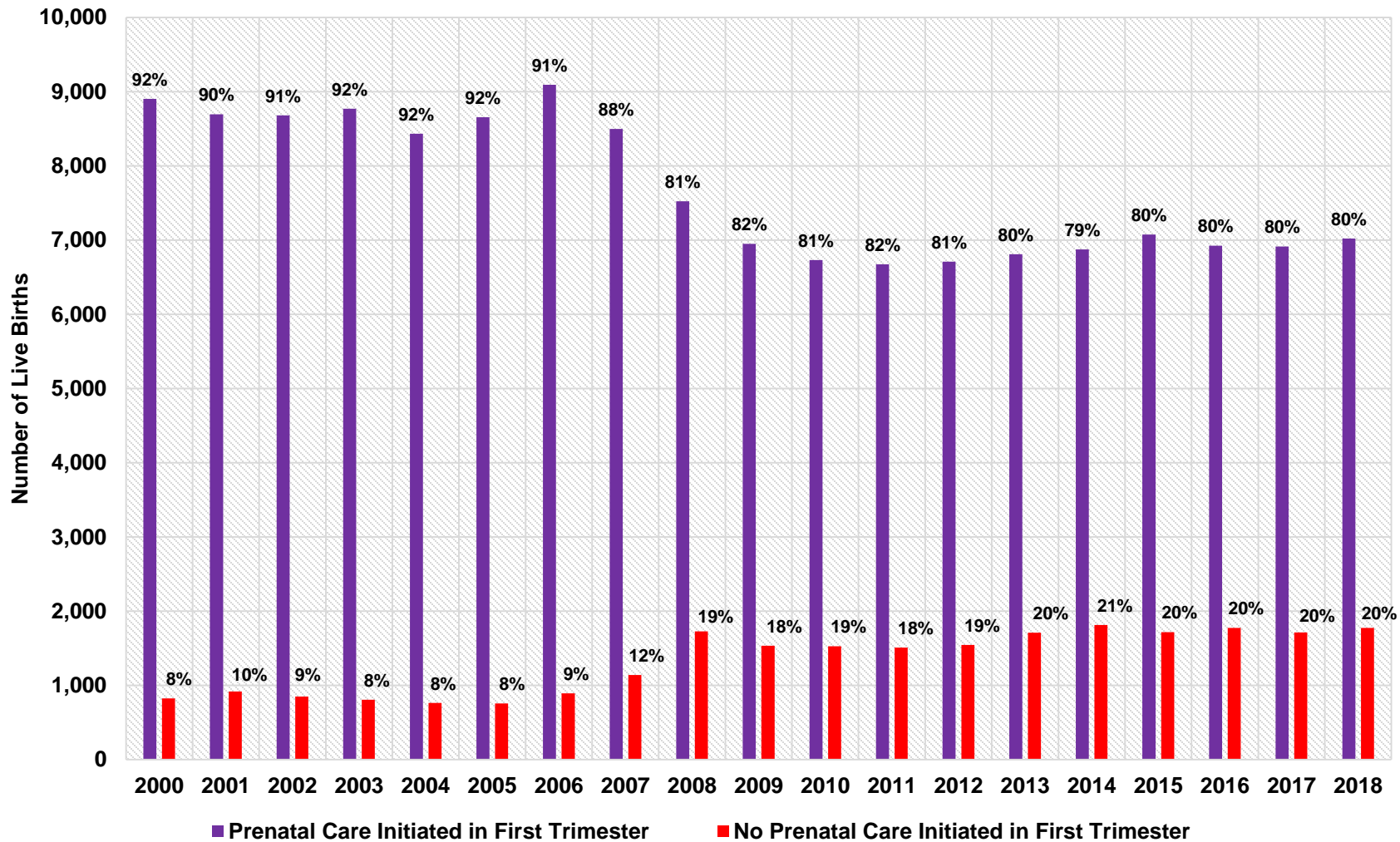


Note: Maternal tobacco use is recorded when the mother used tobacco in any form during pregnancy.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Live Births in Macomb County, MI by Mothers Initiating Prenatal Care in First Trimester and Year (2000 - 2018)

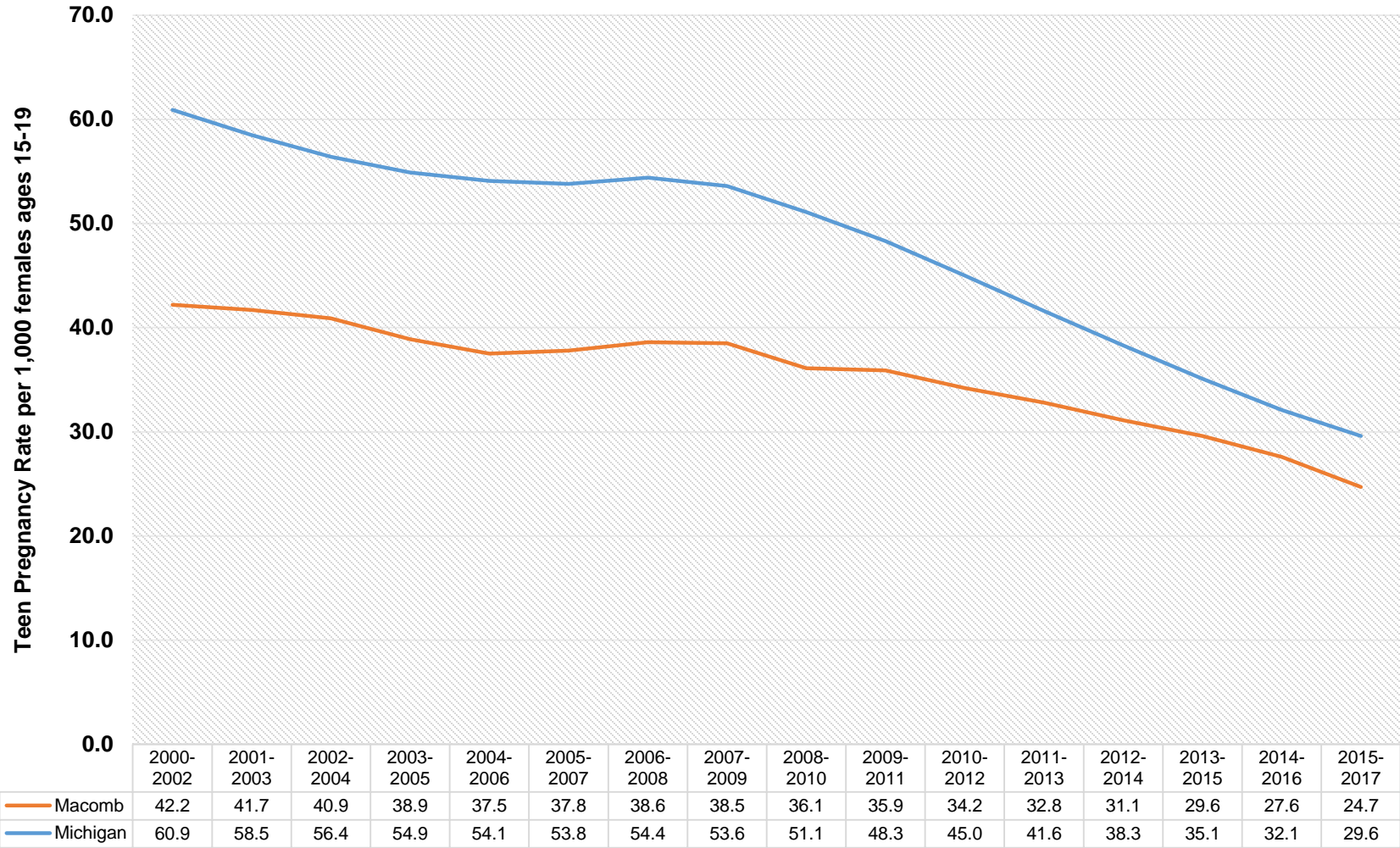


Note: Records with unknown level of prenatal care were excluded.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019

Teen Pregnancy Rate in Macomb County and Michigan by Three-Year Averages (2000 - 2017)



Note: Teen pregnancy rates are per 1,000 females ages 15-19. Pregnancies are the sum of live births, reported induced abortions and estimated miscarriages. Miscarriages are estimated by adding 20% of the live births and 10% of the reported induced abortions.

Source: Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

Updated: November 2019